1: Hocart Y-5 (ca. 1920) 1929 OQ6 Lau OQ6
Lakemba

Naturally, all the villages are now on the coast, and a road made by the Tongans, following the shore, serves them all. Each village has its passage through the reef, some fit for large cutters, some only for canoes at high tide. The passage most in use, though narrow and difficult, is Nandawa, opposite Tumbou.

The whole population in Lakemba (about one thousand) resides in compact villages. Tumbou, the chief village, where reside the chief and his family, lies on the west bank of the Nakula stream and has a population of about 180. On the other bank is the small village of Levuka. Between Levuka and Wathiwathi, among the rocks of the southern promontory, is the site of an extinct village, Tarukua, the survivors of which are in Wathiwathi. Beyond Wathiwathi, begin the mangrove swamps and between them and the irrigated lands is Waitambu. A long gap stretches between this village and the site of Narothake, a former village, the inhabitants of which are in Nukunuku. At Nukunuku, the shore shelves very gradually to the reef, which here lies farthest removed from the island—a distance of ten miles. The distant anchorage is known as Tawaveiwekani (No-relation) because the way is so long that strangers staying in the village neglect to send a share of the feast to those of their party who are looking after their canoes.

The village of Yandrana ranks next Tumbou in size. Nasangalau is third largest, but the second in rank. Near it rises Vangandra, a precipitous rock, jutting out from the hills, on the top of which is the site of the oldest settlement recorded in Lakemban history. The anchorage of Wangatalata (Wanggatalatha), about two miles from Tumbou, was important in the olden days.

The villages other than Tumbou and Levuka form what is known as the "Country." Lauandoko, as opposed to the "Town." If the term Lauandoko is not a corruption, it means "the digging pole strikes," and probably expresses the fact that the Country plants for the nobles in the Town. I have also once heard these villages described as the "Back of Lakemba," but one informant limits this term to the villages on the north coast from Nasangalau to Nukunuku.

Tumbou is the center of culture, manners, and politics. (See Pl. II, *D*.) Villagers coming to Tumbou feel ill at ease, for though no longer compelled to go about Tumbou with folded arms, they are expected to be humble and are conspicuous by their lack of assurance.

Differences in type and character exist between the villages. (See Pl. I.) "Villages differ in the men," says a native, Tui Wathiwathi, "it may have something to do with the soil; some places have soil productive of strong men (*nggele tamata kaukaua*). Doubtless it is the will of God."

1: Hocart Y-5 (ca. 1920) 1929 OQ6 Lau OQ6
Lakemba

The population of Waitambu has never reached a hundred because the Matangi women do not wish it (p. 214). Waitambu as a whole is *tauvu* of Vakano as a whole, and of a clan of Wakai in Yaroi, Matuku. No reason is known for the connection with Wakai. Waitambu is also related to Moala. (For the connection with Mango and Vakano, see p. 215.)

In Nasangalau the clans and sides of the oven are:

Nakambuta	Naikelikeli
	Waipose
	Naivikula
	Navurewa
	Natonga
Nautonggumu	Vandrasikita
	Ndre
	Mbutha
	Naivithethere
Ndreketi	Nambavatu
	Mbautolu
Loma	Nanggaravea

Nakambuta lead; they are the nobles. Nakambuta and the nobles of Tumbou are one. The people of Nakambuta on that account often serve the High Chief, as did the father of the present Ramasi. Ratu Sikeli, whose mother was the elder sister of the present High Chief's father, is reckoned among the nobles of Tumbou. He is a bigger person than Ramasi, the chief, who belongs to Nakambuta. The present holder alone stood in the male line so he was put first. The Ramasi formerly did no planting, but sat in the house. If they planted taro it perished.

The herald of Nasangalau used to be in Ndreketi and Loma, but now he is in Nakambuta. Ndreketi and Loma are brothers; they are the owners of the land; their lands adjoin Tumbou on one side and Vakano on the other. The nobles of Nasangalau came from oversea and Nakambuta owe the land to their mothers. Nautonggumu are the "border" or "teeth" (*inbati*) and get the head of the pig.

The *tauvu* of Nasangalau are Waitovu in Ovalau, Tovulailai in Nairai, and Ndaku in Matuku. The precise clan to which they are *tauvu* is not known. Waitovu and Tovulailai are also *tauvu* to one another. Ketei in Totoya is the *tauvu* of Loma by reason of Raluve and Koilasa.

Yaroi in Matuku and Nasangalau are thorough kinsmen, kinsmen by birth. This is because Vakaotia was first married to a Tui Yaroi, chief in Matuku, and from her are descended the later Tui Yaroi. Then a nobleman of Nasangalau went over to Yaroi and brought her back as his wife, and from that arose the nobles of Nasangalau. Yaroi take precedence because their ancestor was born before the ancestor of Tui Nasangalau.

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

Southern Lau, Fiji : an Ethnography

By LAURA THOMPSON
BISHOP MUSEUM FELLOW; 1933-34.

INTRODUCTION

SCOPE AND METHOD

This monograph is based on field work in ethnography in the Fiji islands, from August 1933 to April 1934, made possible by a Bishop Museum fellowship. The main problem has been to understand and describe the native culture of the southern islands of the Lau or Eastern Archipelago of Fiji not only as it is functioning today but also in its historical setting.

The Lau islands, located on the border of Melanesia and Polynesia (fig. 1, insert), have long been subjected to a diversity of cultural influences from adjacent culture areas. Even within the last century, exotic traits from neighboring islands, especially Ton , have altered the native pattern (pp. 29, 215). Before the advent of western civilization Lau presented the complicated picture of a changing marginal culture which lacked integration. Moreover much of the apparent unity in the configuration in native culture was due to geographic proximity rather than to the inner necessity and slow growth which characterizes true integration. In the last hundred years the interplay of European and Tongan influences has further disintegrated the old native culture. These have affected not only the superficial aspects of life, such as technology, but its deeper phases, such as the social organization and religion.

The complicated history and lack of integration of the Lauan culture presented problems to the ethnologist attempting to study the old life. In order to recover as much of the native culture as possible, I limited the investigation to a group of six islands in southern Lau where western influence had been relatively weak because of their isolation in the Fiji group and lack of commercially valuable natural resources. No Europeans live or own land on these islands which have no communication with the outside world except an occasional government or trade cutter. First, seeking to gain an intimate knowledge of the daily life of a specific group, I spent five months making an intensive investigation of the village of Tokalau on Kambara. Tokalau with 125 inhabitants is the highest ranking village on Kambara, the largest island in southern Lau. Kambara had a population of 446 natives living in four villages. The island was small enough to allow personal contact with each individual and large enough to provide a choice of good informants. After I had gained an understanding of the culture on Kambara I spent the

[Text continues on p. 5.-
Analyst]

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

remainder of the time surveying the culture on the islands of Fulanga, Ongea, Mothe, Namuka, and Wangava in order to check and gain prospective on the detailed picture and to secure a larger choice of informants. Altogether I studied 11 villages with a total population of over 1,500 natives.

The greatest difficulties in the work were encountered in attempting to recover the old religion after almost a century of mission influence and to analyze the intricacies of the social system after sixty years of British rule. Most of the old religion has been lost. The fragmentary account here presented (pp. 105-119) has been recorded as it was obtained from aged informants, especially Moto and Tchosaia of Kambara, Kalo of Fulanga, and Mosesi of Namuka. Much of it has been taken from the notes of Bernhard Tueting. It may be colored by the teachings of the missionaries.

Changes due to interisland warfare, to Tongan contacts, and to European influence have obscured or changed important aspects of the social organization, especially the phratry division, the local unity of clans, the ranks and functions of clan titles, and native social values in general. To gain a picture of the system as a whole it was necessary to make a detailed analysis of the social organization of the 11 villages studied. The analysis as here presented (pp. 31-103) is based on the genealogies of 37 clans recorded in the field, sketch maps of each village, property rights, clan gods and their incarnations, legends, ceremonies and the statements of reliable native informants. The data have been checked by an examination of archaeological sites such as hamlets, fortresses, and sacred places (pp. 216-223).

As will be seen in the following pages, a knowledge of the Lauan social system, based as it is on the native concept of mana expressed in social prestige, is vital to an understanding of the culture as a whole. Moreover, the evidence from which the system has been reconstructed is rapidly disappearing. Hence time was devoted to its study at the expense of the study of other phases of life—such as technology, social ceremonial, and games—which it is hoped may still be studied in the future. In such studies of material culture as were recorded an attempt was made to emphasize functional rather than technological aspects. The development of the individual, social sanctions and law, native medicine and changes due to the introduction of western civilization have been described in a special study of culture change and colonial administration in Lau (23)[1] and hence have not been included in this monograph.

This study is an attempt to record the most important aspects of the native culture of Lau as a whole before they disappear. It is necessarily incomplete. The aim has been to describe the culture of southern Lau as revealed by field research on the six islands visited in its geographic setting and, as far

[1] Numbers in parentheses refer to Literature Cited, p. 224.

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

539 THE COMING OF THE CANNIBALS

"Sa vura ko Lekutu Levu!
Toko luvemu,
Toko luvemu!"

"The people of Lekutu Levu are coming!
Hide your children,
Hide your children!"
Ancient war cry from Kambara.

174 How long have these tiny islands been populated and whence came the inhabitants?[5] Fiji was discovered by Tasman in 1643, and records of early voyagers indicate that although there were then two or three times as many Fijians as there are today,[6] they were essentially the same racial type. The natives were fierce, warlike cannibals. Like the inhabitants of all the islands of the great Pacific east of the Malay archipelago, they were living in the stone age. Since they had no written language their traditions and memories of the past were transmitted by word of mouth from generation to generation. Hence we have only their lore, their way of life, and their archaeology on which to reconstruct their history.

The story of the peopling of these islands is a part of the story of the peopling of Oceania, which has not yet been completely unraveled. We do know, however, that the early inhabitants of the Pacific came from southeastern Asia and reached their island homes by sailing the open sea in large outrigger canoes. We also know that Polynesia was the last large area in the world to be settled, and that the earliest inhabitants must have reached the main Polynesian islands more than a thousand years ago.[7] Moreover, at least part of one

[5] For source material on this chapter see L. Thompson, "The Culture History of the Lau islands, Fiji," *American Anthropologist*, Vol. 40, 1938, pp. 181-198.

[6] There are 97,651 natives in Fiji, according to the 1936 census. (Census report, Fiji, 1936.)

[7] Peter Buck, *Vikings of the Sunrise*, New York, 1938, p. 64.

[161]

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

clan's claim to the east side. However, the Tanggu clan enforces its claim by actual cultivation of crops on the island and by control of the fishing and turtle breeding there. But since such a claim is substantiated not only by tenure but also through the clan genealogies there was a constant dispute among nobles of Tanggu and Tokalau regarding their genealogies and the relative merits of the two claims.

The effect of the government policy concerning land ownership has been far-reaching. Native retention of ancestral lands has cemented the tie between hereditary social groups and the soil. A man cultivates the garden plot of his ancestors and frequently even builds his house upon the same house site. In spite of the changes taking place in the culture the link with the natural environment has not been broken. This has not only physical significance in that the natural resources upon which the old culture was built are still available, but also psychic significance in that a social group is still in close contact with its sacred places, sacred animals, and plants. The importance of this condition can hardly be over-emphasized. As long as the physical setting is retained there is a possibility of revitalizing a culture so that a satisfactory balance may be re-established in spite of its changing content. Evidence of new adjustment to the old environment is seen in the increase of the population in recent years—a sign of healthy and socially adjusted communal life which will be discussed in Chapter VI.

As a result of the land policy the native does not suffer from the modern western economic system. He is economically independent and does not need to compete with Europeans or Indians[32] in the struggle for existence. No matter how he chooses to earn his living he can always return to his own village and cultivate his ancestral lands. Hence there is no native unemployment or rehabilitation problem in Fiji.

[32] Since 1879, laborers have been imported into Fiji from India, and in 1936 the total Indian population in Fiji was 85,002. There are, however, no Indians in southern Lau.

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

439 neglected, and the natives began to buy food from the store.
245 The native culture began to break down. The trade cutter
178 almost completely replaced the sailing canoe, and during this period the large double war canoe disappeared. The art of pottery making by the Levuka women of Lakemba[38] fell into disuse as native clay pots were displaced by large imported metal ones. The technic of making fish hooks was lost, and imported paraphernalia such as lines, nets, and ropes were used instead of native products. Iron roofs appeared on the houses of the most prosperous natives, and even a few small metal tanks were used to catch the rain water from them.

[554] A factor of great significance in the decline of native material culture during this period was the social prestige attached to all imported articles. Everyone strove to buy as much as possible from the store, and the number of imported articles which a group possessed was limited only by its ability to pay the price in copra. Clothes, iron roofs, canned food, and metal tools all became the means by which a person might raise his status in the community.

464 At this time native labor was in great demand, especially
177 on copra plantations in many parts of Fiji, and large numbers of young men from the southern islands left their villages under contract to work for periods of a year or more. While away the young men came under greater western influence than had penetrated to the isolated southern islands, and when they returned they brought not only new goods and money but also new ideas. The loss of the young men of the village not only cut the available supply of labor but also upset the balance of sexes in the villages. It led to the post-
[161] ponement of the marriage age of the young people. In spite of this factor the population of Lau began to increase.

439 As in many parts of the South Seas, the period of prosperity
245 in Fiji ended abruptly with the slump in the price of copra
435 after the world war. Largely because of overproduction and

[38] L. Thompson, "The Pottery of the Lau Islands, Fiji," op. cit.

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

753 rooted in the Lauan fundamental psychological set, for on matters dealing with the vital forces of the clan—life, sickness and death—the natives are naturally very slow to change. Hence the introduction of modern hygiene and medicinal measures is bound to be a painstaking and difficult process.

539 BIRTHS EXCEED DEATHS

Oi lei nonggou turanga ko sa mbui ti au!
Sa lako e na sala ka senga ni lesu tale mai!

Alas, my chief, alas!
He has gone along the path and will never return!

Death chant for the chief of Fulanga.

164 BEFORE the coming of the white man the Fiji islands, like 731 other South Sea groups, had a limited variety of disease germs. Yaws, ankylostomiasis, leprosy, and elephantiasis were present, probably also tuberculosis. It is doubtful whether or not there was dysentery. Malaria, venereal disease, and infectious fevers such as measles, influenza, and whooping cough were absent. As in other parts of the Pacific new varieties of disease germs, brought by the white man, were fatal to the natives who had no resistance or immunity against them. The most disastrous epidemic recorded in Fiji was that of measles in 1875, one year after annexation of the islands by Great Britain. It is estimated that this epidemic wiped out one-third of the entire population of Fiji, and aged Lauans who survived it still tell how they helped to bury the dead of their villages. The people of Muanaithake, Fulanga, say that a row of skeletons on the beach some distance southeast of the village bears witness to this great tragedy, during which the living could not find time to bury the dead.

161 In 1881 the native population had fallen to 114,748, in 1891 164 to 105,800, and in 1905 to a low point just under 87,000, mainly 731 because of dysentery, whooping cough and a second epidemic of measles. For the next six years the population remained

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

stationary. In 1911 it began a slow but steady increase which has continued to the present, with the exception of the influenza epidemic in 1918, which reduced the population to the lowest point, 82,000 in 1919-20. In 1936 the native population of Fiji reached 97,651.[63]

The colonial government has been directly concerned with the Fijian population problem, and has made great efforts to prevent depopulation and bring about an increase in the numbers and health of the natives. In 1893 a commission was formed to study the problem of remedies for depopulation, and its monumental recommendations have formed the basis for modern health and medical policy in Fiji and other parts of the Pacific.[64]

The death rate has fallen from over 50 per 1,000 in 1891 to the lowest point of less than 18 per 1,000 in 1933. Chiefly because of dysentery, enteric fever, and pneumonia it rose to 28 per 1,000 in 1936. Dr. S. M. Lambert, director of the Rockefeller Foundation work in Fiji, states "historically the death line shows, to my mind, what constructive medical work can do for a native people. The gradual fall in the death rate can almost be measured in terms of the expansion of medical effort."[65]

[63] In 1936 the total population of Fiji was as follows:

	Persons	*Percentages*
Europeans	4,028	2.03
P.E.N.D. (Anglo-Fijians, Anglo-Polynesians, and others)	4,574	2.31
Fijians	97,651	49.22
Indians	85,002	42.85
Polynesians	3,553	1.79
Melanesians	1,616	.82
Chinese	1,751	.88
All others	204	.10
	198,379	100.00

(Colony of Fiji, Census Report, 1936, p. 4.)

[64] For recommendations of this commission see *Report of the 1893 Commission on Fijian Depopulation.*

[65] S. M. Lambert, *"The Depopulation of Pacific Races,"* Bishop Museum Special Publication 23, Honolulu, 1934, p. 22.

161
162
592

3: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

TABLE 2. GROWTH OF POPULATION IN ELEVEN NATIVE VILLAGES OF SOUTHERN LAU, FIJI, 1921-1936

Island	Village	1921 Total population	1921 Male	1921 Female	1921 No. of houses	1921 Average number of occupants per house	1936 Total population	1936 Male	1936 Female	1936 No. of houses	1936 Average number of occupants per house	Total population increase	Increase rate per 1,000
Kambara	Tokalau	109	48	61	19		127	55	72	19			
	Lomatchi	46	17	29	8		40	21	19	10			
	Tanggu	130	69	61	28		138	60	78	34			
	Undu	89	45	44	19		112	50	62	22			
Marambo*		8	1	7	1								
		382			75	5.09	417			85	4.91	35	92
Fulanga	Muanaithake	205	93	112	40		205	88	117	23			
	Muanaira	41	23	18	12		79	37	42	12			
	Naivindamu	64	34	30	12		106	55	51	16			
		310				4.38†	390			51	7.65	80	258
Ongea	Naithulaianga	101	56	45	21	4.81	105	51	54	29	3.62	4	40
Namuka	Nawatchia	216	113	103	53	4.08	269	123	146	52	5.17	53	245
Mothe	Nasau	187	105	82	51		206	106	100	50			
	Korotolu (formerly called Leva‡)	75	42	33	17		81	41	40	21			
		262			68	3.85	287			71	4.04	25	95
Total		1,271					1,468					197	154.99

Colony of Fiji, Census Reports, 1921, 1936.

* The inhabitants of Marambo moved to Kambara after 1921.

† Since the number of houses recorded for Muanaithake in the 1921 census is probably an error, I have reckoned the average number of occupants per house in Fulanga in 1921 on the basis of the other two villages.

‡ The inhabitants of Leva village moved to their present site after 1921 and named the new village Korotolu.

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

744 Having reviewed the medical and health work being done in the colony and its effect upon the native population as a whole, let us turn to the specific region of southern Lau. These islands are perhaps the most isolated in all Fiji, and as we have seen are far from the nearest native medical practitioner, nurse, or hospital. The natives, therefore, have never had constant medical attention from doctors trained in modern medicine, and depend upon their native system of therapeutics for their daily needs. However, the government's systematic campaign for the improvement of native health has had a marked effect upon the natives of southern Lau. Since epidemics of infectious diseases have a tendency to spread throughout the colony their control has naturally reduced the death rate in the southern islands. Furthermore, medical officers visit each island at least once every year or two. They have organized the women into child welfare committees and instructed them in modern methods of child care. They inspect village sanitation and housing, and instruct the natives in hygiene and the village headmen in their duties as health administrators. However, housing conditions have not kept up with the population increase in Lau. The six islands studied show an average of 4.04 persons per sleeping house in 1921 and an average of 5.10 persons per sleeping house in 1936 (see Table 2), which is less, however, than the general average of 6.31 persons per sleeping house for the natives of the whole Fiji group in 1936.[68]

161 The population of the six islands studied in southern Lau has increased during the 15 year inter-census period (1921-35) at the rate of 154.99 per 1,000 (Table 2) as against 155.97 per 1,000 for Fijians in general.[69]

When we study the vital statistics in detail we note a great variation in rate of increase between the six islands. For Kambara the increase rate per 1,000 is 92, for Fulanga 258,

[68] Colony of Fiji, Census Report, 1936, p. 4.
[69] *Ibid.*

3:Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

for Ongea 40, for Namuka 245, and for Mothe 95. Thus Fulanga and Namuka have relatively a very high rate of increase, and Mothe, Kambara, and Ongea a low rate. Even though the figures with which we are dealing are small and there is a probability of error in census reports among people who are still to a great extent pre-literate, such a wide variation has significance. All have been equally exposed to the government health campaign. Hence there must be other important factors contributing to the rate of population growth.

Besides direct health measures, other factors which may contribute toward social stability and population growth, such as the lack of inter-island warfare, the system of indirect rule, and peasant proprietorship apply fairly equally to all the islands. Other obvious factors which suggest themselves, such as the adequacy of the garden land, the loss of population by migration, disproportionate number of females to males in the population, and influence of the Tongans, fail to explain these differences. For instance, of Fulanga and Namuka, the two islands having by far the greatest increase in population, Fulanga has the least soil and garden produce of all the limestone islands, and Namuka has the most soil and enough food in excess of her needs to trade with the famine group. Moreover, of the other three islands, each of which shows a relatively small increase, Mothe has plenty of garden land and food, whereas Kambara and Ongea lack both. As far as migration is concerned, Fulanga, according to the genealogies, gains practically no inhabitants through inter-island marriage, for Fulangans on account of their low social standing are not sought in marriage by natives of other islands, and when such marriages do occur the couple usually does not settle on Fulanga but seeks better land on the island of the non-Fulangan spouse. Namuka on the other hand, because of her rich soil, gains inhabitants by marriage from all the famine islands. Of the islands having a disproportionately low increase, Mothe gains by marriage while Ongea and

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

Kambara tend to lose.[70] Kambara also loses through the inclination of her men for the sea. Southern Lauans make excellent sailors on trade and government cutters in Fiji, and more young men ship as sailors from Kambara than from any of the other islands studied. In regard to the sex ratio, all the islands show a disproportionately large number of females to males except Mothe and Ongea, which show a fairly balanced ratio (see Table 2). Tongan influence has been strong on all the islands under consideration and hence fails to explain the variation.

In seeking an explanation for the difference in rate of increase we find, however, that Fulanga and Namuka have several traits in common which are absent in the other three islands. The people of these two islands are outstanding in southern Lau for their zest for life, industriousness, and lack of self-pity. Both islands have poor anchorages and are disturbed less than the other islands by contact from the outside. Consequently the natives of these two islands are relatively conservative and maintain a stricter moral code. Finally, on these two islands, according to their genealogies, there are no clans belonging to the upper class. They are inhabited by clans belonging to the lower class. Hence they are easily administered and lack the intrigues and petty jealousies present among the nobles of the upper class. The Ongea clans also apparently belong to the lower class. However, at least two other important factors may have played a part in lowering the rate of increase on Ongea. There has been more inbreeding on Ongea, according to the genealogies, than on any of the other islands studied. Moreover, Ongea has the best anchorage in the group, and is visited not only by government cutters but also occasionally by yachts and naval craft.

Compared to Fulanga and Namuka, Kambara and Mothe

[70] These facts are based on a comparison of clan genealogies which were recorded for every island studied. For further details see "Marriage" in L. Thompson, *Southern Lau, Fiji, an Ethnography*, op. cit.

3: Thompson E-5 (1933-1934) 1940 OQ6 Lau OQ6
Kambara

161 182 have been in closer contact with influences from the outside world. Old tabus have broken down to a great extent on both islands and the morale is relatively low. The inhabitants are inclined to be self-pitying and to have lost a great deal of their energy. Moreover, these two islands are centers of the upper class and the conflict between the island chiefs and the colonial administration is reflected in unrest and political wrangling. These factors have probably played a rôle in retarding the rate of population growth.

It is clear from the above that any attempt to explain the increase of population of Fiji must take into account a complicated set of interacting factors, each of which contributes to the picture as a whole. From the analysis of population increase in southern Lau it seems fair to assume that, in this area at least, a factor of great importance in population growth is the presence of a spiritual force—a will to survive or zest for life—which grows out of a healthy and socially adjusted communal life. Here the greatest increase in population is found on islands least disturbed, not only by external influences but also by internal political jealousies.

5: Thompson E-5 (1933-1934)1949 OQ6 Lau OQ6
Behavior Theory W3

the community made available by the indigeneous technology. Analyzing Lauan culture from this viewpoint, we find a complementary set of institutions which do actually tend to function toward just this end.

For example, after the birth of a child the father moves out of the family dwelling and sleeps in the men's house of the clan. He is not allowed to have sexual intercourse with his wife until the baby is weaned, a period of from nine months to two years. The strict observance of this custom is attested by the fact that siblings in Lau are almost without exception at least eighteen months apart. Thus the men's house complex, correlated with certain tabus, functions as a means of birth spacing and population control and of protecting maternal and infant health. Ritual continence was practiced in Lau on many occasions. Several methods of abortion were used, mainly by unmarried mothers. In Fulanga old people who had outlived their usefulness, according to native standards, were formerly abandoned on a small island in the lagoon. Where chieftainship was highly developed, those who broke tabus concerning the nobility were clubbed to death. Raiding between villages, in the course of which men, women and children were killed, was not infrequent in the group, and those who were captured, regardless of age or sex, were consumed by the victors at cannibalistic feasts. These are some of the Lauan practices which, together with accidents, hurricanes, disease, and a rate of infant and maternal mortality which was probably rather high, tended to limit the size of the population in relation to the available resources within the natural and cultural setting. Although in historic times Fijian population totals were greatly reduced, especially by the ravages of white man's diseases, the low point was reached at about 1911. Thereafter the trend has been slowly upward. The population of southern Lau gained 155 per 1,000 between 1921 and 1935.[21] At the time of the present field work, the population of the community was about 1,500.

Certain significant generalizations which grow out of the foregoing analysis may now be formulated.

We noted that in our island community a unique and balanced biotic system developed in isolation over a very long period of time and in the absence of large land animals. The advent of man, which occurred relatively late in the ecological developmental sequence, introduced not only a new species, namely *Homo sapiens*, into this natural community but also other fauna and flora, as well as the artifacts carried by man as part of his cultural equipment. Still more important, perhaps, it added human cultural processes to the fundamental ecological processes already operating in the area. In a relatively short time, from the eco-historical viewpoint, there emerged, on the basis of the ancient biotics, a new eco-cultural structure which involved plants, animals

[21] For details see Thompson, 1940a, p. 137.

[ONGEA ISLANDS]

13 From the latter[1] a good trail leads across the central flat to the
[987] village. The bay on the south side of Ongea Levu is too shallow for vessels larger than small cutters to enter.

312 There is no fresh water other than rainwater which is caught and stored in a cement cistern at the village.

136 No wild animals other than rats, lizards and snakes occur on these islands. There is a large green lizard called "vokai" by the natives, and one (perhaps two) species of gray-brown snakes. The natives report wild goats, but neither they nor their tracks were seen..

361 All the inhabitants, about 100 in number, live in the village
[161] on Ongea Levu, but they cultivate considerable areas on both Levu
241 and Ndriti. The principal products raised are manioc, sweet potato,
245 yams, taro and bananas. The coconut groves are not so extensive as the area of the islands would permit, but they apparently produce sufficient copra to supply the humble wants of the natives.
181 The people are industrious and fairly intelligent despite their
144 isolation. There is a more or less distinct Tongan cast. Wood
322 carving, mat weaving and tapa beating are carried on to some extent,
285 and numbers of canoes are cut in the thick woods. Pigs and a few
287 fowl are raised, and dogs are kept as pets.
231

[1] [i.e.--anchorage on the west side of Ongea Levu. --Analyst]

[FULANGA I]

312 Water is available only at the villages where rainwater is caught and stored in cement tanks.

13 The limestone hills are thickly covered with the usual lowland forest. The flats on both sides support extensive groves of coconut palms and cultivated areas. Mangrove thickets border the S.W. side of the lagoon.

The animals include birds, rats, lizards and probably snakes, although none of the latter were seen, except the banded water snake. [231] The natives have domestic fowls, pigs and dogs. Mosquitoes present.

361 There are three small villages on Fulanga. Muanaithake and Muanairs are close together on the south ocean side. The former [161] has a population of about 200, living in 40 houses; the latter is much smaller, about a dozen houses and 40 inhabitants. Naividamu is situated on the N.W. arm, on the lagoon side. It has a population 487 of 64, living in a dozen huts. The three villages are connected by a good path.

181 The people appear prosperous and fairly industrious. The women 462 catch fish and dive for shell fish and oysters within the lagoon. The [226] men do the reef fishing and cultivate the fields. Canoe making and 291 [322] some carving is done, and the women weave mats and beat out masi (tapa). [285] Some little copra is cut and shipped and the usual crops of sweet [287] potatoes, yams, manioc and bananas are grown, the latter for local 295 consumption only. 241

[p. 16]

13 5. NAMUKA-I-LAU lies about 8 miles N.W. of the Yangasa Cluster.
[361] (Village: S.18° 51', 178° 38' W.)It is rectangular in shape, a little over 4 miles long by 1 broad, and composed of coral limestone. A barrier reef, reduced to a chain of coral heads on the N.W., surrounds the island. On the north side of the island a rough ridge of upraised coral limestone rises abruptly from the sea to a height of 260 feet, and on the S.W. there is a short ridge up to 240 feet high.
[361] The village is located on a large bay facing the south, and another sandy bay is located at the west end. Each contains two small islets. The interior is a flat covered with extensive groves of coconut palms and cultivated areas. Along the ridges and at each end is lowland forest. There is a small marsh near the village.

The south bay is shallow and inaccessable. Good anchorage may
[487] be had within the reef off the north side. A trail leads over the ridge from a landing situated half way between the highest peak (260') and a more conspicuous double peak (210'), near a coconut grove.
[312] Rainwater is caught and stored at the village.

No land snakes, but water snakes are to be found occasionally on the rough coral beaches. Rats, hermit crabs and lizards are present. Mosquitoes and dragonflies ~~[illegible]~~ numerous.

361 The village is of moderate size, with over 50 houses and a pop-
● 161 ulation of about 216. The inhabitants are industrious and prosperous
181 cutting a large amount of copra and farming extensive cultivated areas.
295 There is a Chinese store. There is considerable beating of masi (tapa),
291 but very little carving.
287
327
366

[p. 23]

[KARONI I.]

13 are low with deep indentations and mangrove thickets. The north-west end rises abruptly from the water in a 120 foot hill, which also slopes steeply on the land side.

There is one small grove of coconut palms. Lizards, snakes and hermit crabs are present. White terns numerous in addition to the usual birds.

484 The island is uninhabited, but is occasionally visited by the
● 161 natives of Mothe, especially for timber, there being a trail cut
313 into the interior.
487

[p.26]

13 7. ONEATA is a partly coral limestone, partly bedded sandstone island, lying about 12 miles north of Mothe. (S.18° 26', 178° 30' W.) It is 2 1/2 miles long and about 7/8 mile wide, pointed at both ends, and with three small wooded peaks up to 160 feet high on the south-east. Toward the east end there are two cross-ridges covered with forest. Off the east point a small conical islet, Loa, rises to a height of 140 feet. The west end has a sandstone hill, covered with grass, scrub, Pandanus and Casuarina. A volcanic ledge borders the east point. The central portion of the island is occupied by a narrow brackish swamp. South of it (between the two villages) are to low knobs or ridges of sandstone. On the north side of the low central depression is a large area of cocoanut palms and cultivated patches.

The island is surrounded by a long triangular barrier reef, extending six miles to the eastward and four to the north-west. Thru it there are four passages, three on the west and one on the north. The water is moderately deep within the lagoon, except off the S.W. point of the island. There is good anchorage off the main village, Wainggori, in the S.W. bay.

312 Water is abundant. It is piped to Waing-gori from a spring in the west end sandstone hill, which is said to run all year round. There is also a fresh water bathing pool near the swamp. Rainwater is caught at Nakuiloa, the other village.

13 In addition to the usual lowland and littoral trees, noted "yasi" sandlewood. Land birds numerous, but no water birds seen. No snakes reported. Aquatic insects numerous, and mosquitoes very troublesome.

361 There are two villages, Wainggori (Waigori) and Nakuiloa, both
●[161] situated on the south side. The former claimed a population of 250 although the 1921 ~~census~~ census gives the figure 138. There were

[ONEATA I]

361 certainly more than the reported 25 houses. Dakuiloa is much smaller,
[61] with 21 houses and 85 people. There is a store at each village,
366 Chinese at Wainggori, Japanese at Dakuiloa. The people seemed
177 friendly, courteous, generous and sincerely religious. There was a
181 noticeable Tongan element.
194

Quite a little agriculture is carried on by the natives, good
241 corn (maize) being raised in addition to the usual sweet potatoes,
yams, manioc, taro, bananas, and pumpkins. The people are prosper-
181 ous and industrious. Some little mat weaving, masi (tapa) beating,
285 and wood carving is done.
287
322

[p. 29]

13 T. KOMO is a small island of volcanic origin lying 9 miles north of Namuka-i-Lau and 6 miles west by south of Mothe. (S.18° 41', 178° 59' W.). It is sub-crescent shaped, 1 1/2 miles long by 5/8 mile wide. On the north a ridge rises to an elevation of 270 feet from the sea, with moderately steep slopes; covered with grass, scrub, Pandanus and Casuarina trees. The summit is crowned by a small patch of coconut palms. The south side and west end are flat with cultivated areas and small groves of coconut palms.

Komo Ndriti, a small, rough, wooded islet of upraised coral limestone, lies a half mile off the west point.

A barrier reef encloses these islands on three sides, the northwest being open except for coral heads and a few small patches of reef. Here there are two good ship passages, 320 and 550 yards wide.

512 Although there are one or two small murky streamlets, rainwater is caught and stored in the village for drinking purposes.

13 Birds, lizards, rats and hermit crabs are the only wild land animals. Insects not very abundant and landshells scarce.

361 The village is located on the S.E. side, and consists of about 25
[161] houses. The natives, about 140 in number, are great fishermen, the
226 women using hand nets and basket traps, plated from beach vine, near
229 shore, while the men fish on the reef. They raise a few domesticated
462 pigs, fowl and dogs. Some little cultivation is done, especially of
231 sweet potatoes.
241

[p. 31]

13 9. OLOKUA is a small islet of volcanic material, 8 miles N.W. of Komo, surrounded by a semi-frigging reef. It is about 3/8 mile long by 1/4 mile wide, with three hills, the southern one of which rises 250 feet. The west side has so eroded as to disclose an interesting formation of bedded tuff, which slopes outward and downward from the center. The hills are covered with a very open stand of small trees, between which are areas of grass or bare ground strewn with weathered lava rocks.

Near the middle of the east side a depression or minature valley, with a trickle of marky water, holds a patch of coconut palms. Another small grove is located directly across the low divide on the west side, and there are a few palms on the S.E. end.

Birds are numerous, including barn owls and ground doves. Lizards, hermit crabs and probably rats present. Insects and landshells very few.

245 [161] 484 There are no inhabitants, but copra is gathered, probably by the natives of Komo.

[p.32]

13 10. KAMBARA is a moderately large, ovate island of upraised coral limestone with a volcanic intrusion at the N.W. end. The island is situated at the S.W. corner of the Lau group. Its south end rests upon the 19th parallel south and its west reef touches the 179th meridian west. It is 4 1/2 miles long and nearly 3 miles wide.

The greater part of the island is a wooded basin, surrounded by a continuous ridge of upraised limestone, up to 350 feet high, which drops abruptly toward the sea. The highest peak on the island, Delaioloi, is of volcanic material, 470 feet high, at the N.W. corner.

There is no harbor, but anchorage in 12 fathoms, sand and coral, may be had with the usual E or S.E. wind, off the N.W. corner, opposite the village of Tokalau. Landing is easy. At this point the barrier reef which surrounds the island is reduced to a line of coral heads.

[312] Water is not abundant on Kambara, but small supplies might be obtained at the villages, where rainwater is caught and stored in cement tanks.

[241] Part of the N.W. end of the central basin has been cleared of forest and planted to sweet potatoes, yams, manioc, pumpkins, bananas and other native foods. The remainder of the basin is covered by a thick, tropical, "lowland" forest. Along the N.W., N.E. and S.E. sides the beach is a sand flat underlain by corse sandstone and covered with groves of coconut palms and the usual beach growth. Portions of the N., W. and E. sides are percipitous undercut cliff.

The familiar land animals; crabs, lizards and rats present. No snakes seen, although the natives report them present.

361 [161] There are four native villages: Tokalau, at the N.W. corner with 109 natives; Lomati, about a mile down the W. coast, is a small, but [368] clean and prosperous looking village with an attractive church and [161] 46 natives; Undu, at the S.E. end, situated in an extensive coconut grove, with 89 inhabitants; and Nggalinggali (Qaliqali), the largest

[p.34]

[KAMBARA I.]

361 of the four, on the east side, a little north of the middle, with 180
[161] residents. A trail leads across the basin from the latter to the
487 garden areas, which seem to be cultivated jointly by the people of the
241 three northern villages.

With the extensive timber at hand, the natives of Kambara have
396 long been noted for their canoe and boat building as well as for
322 various kinds of carving.

13 This is the largest of the dominately limestone islands and would be well worth concentrated collecting.

[p. 35]

13 11. MARAMBO Island is a small, nearly circular limestone island located 7 miles east of the south end of Kambara. (Lat.18° 59', Long. 178° 50' W.) The surrounding reef is fringing in character, about 1 1/2 miles on a side. The island is about 1200 yards in diameter, with a rough flat topped hill on the north, "160" feet high (nearer 200 feet), the summit having a densely wooded depression. Between this hill and the west beach, where there is a low ridge, is a small flat, wooded and with coconut palms. South of the hill is a broad area of rough "badlands".

There is no anchorage, but landing is good thru a gap in the reef on the north side, leading to a broad sandy beach.

[312] No fresh water noted.

The surface is covered with the usual thick lowland forest, and the sand beach has an extensive growth of coconut palms and beach plants, especially at the N. and S.W. ends. The usual birds and small crabs and lizards present.

361 The island is uninhabited most of the time. There are four
245 tumbled-down huts on the west side which are occasionally used by the
484 Kambara natives when gathering copra. The 1921 census gives a pop-
● 161 ulation of 8. At the time of our visit (Aug.26,1924) one of the huts
484 was occupied by a man and two boys, stranded en route from Komo to
Fulanga. Most of the island is too rough for cultivation, but in
241 addition to the two groves of coconut palms there is a small cultivated
area toward the S.W. end.

1

[p.36]

13 12. WANGAVA island is of rough upraised coral limestone formation, 3 miles N.E. of Kambara. It is shuttle-shaped, 3 1/2 miles long and 1 mile wide. The island is surrounded by a rough marginal limestone ridge, rising steeply from the sea to 350 feet, enclosing a basin, much of which is occupied by a brackish lake. This lake is much more extensive than shown on charts of the island, being over a mile long and filling the entire N.E. two-thirds of the interior. The S.W. end is an undulating wooded plateau, with a few patches of coconut palms and wild lemon trees. There is also an extensive grove of coconut palms at the N.E. end of the lake, and small patches along its shore.

The rough, "badlands" of the surrounding ridge are covered with the usual lowland forest. The sand beaches have the usual littoral vegetation, including Erythrina indica, not seen on every island. The interior [139] contains plenty of good soil for cultivation, none of which is in use.

Landing is favorable on the N. side, where there are several sand beaches and the surrounding barrier reef is broken up into patches of coral heads. Anchorage may also be obtained here with an off shore 481 (E. to S.W.) wind. A trail leads into the interior from a sand beach 312 at the N.W. end. No fresh water seen.

361 The island is uninhabited, but there are some huts on the N.W. ● 161 beach, used by natives from Kambara, collecting copra. In the interior 295 trees have been felled in places. 484

[p. 37]

13 15. TUVUNASITHI is a very small island of upraised coral limestone, 13 miles N.W. of Wangava and 25 miles S.W. of Olorua. It is sub-circular in outline, 1/2 mile in diameter, and rises in a steep, crescent shaped ridge on the east side to 200 feet elevation. It is surrounded by a fringing reef with no entrance. The S. and E. sides are rocky, the N. and W. sandy. The east ridge and west flat both consist of well forested coral "badlands".

There is no anchorage. Landing is possible on the N.W. side at half tide or higher; a small break in the reef giving access to a sandy basin from which the sand beach may be reached.

[312] There is no fresh water.

There is the usual littoral vegetation, the north and west beaches having more Pemphis than usual. There are small clumps of coconut palms.

245 161 361 The island is uninhabited, but the copra is collected and there is a small hut on the N. beach.

[p. 38]

361 Lakemba has seven native villages, Tumbou being the largest one
161 in Lau, with a population of 283. The others in order as one goes
[491] counter-clockwise along the well kept connecting road are:- Wathiwathi, on the east side of the south-jutting peninsula, 130 natives; Waitambu, three quarters of a mile to the east, 76 inhabitants; Nukunuku at the S.E. corner of the island, at the head of a small bay, 70 natives; Yandrana, along the banks of a fair size stream, at the N.E. corner, 187 inhabitants; Vakano, about 2 miles to the N.W., 70 natives; and Nasanggalau, with 150 inhabitants, about a mile to the westward at the mouth of the next stream. The west end of the island, opposite the
423 Wankatalatha anchorage, is privately owned. There is a small store,
366 run by Chinese in nearly every village, and a large store run by the
177 Lau Traders, Ltd., at Tumbou.

181 The inhabitants are thrifty, intelligent and industrious, drying
439 and exporting a large quantity of copra. There are extensive cultivated
295 areas containing yams, sweet potatoes, etc., in the valleys. Consider-
241 able masi (tapa) is made.
287

Lakemba was the first island in Fiji to be Christianized by
799 British Missionaries (1853). The Provincial School, to which boys
871 from all over Lau are sent, is situated near Tumbou.

13 El. TUVUTHA' is a high, moderate size island of upraised coral with intrusions of volcanic material, 5 1/2 miles south of Vekai. (S.17° 40', 178° 48' W.) It is triangular in outline, 3 1/4 miles long, 1 3/4 miles wide at the north end, and tapering toward the S.S.E. The rough, heavily forested limestone cliffs, rising to a height of 750 to 800 feet on the west, enclose a central basin. The southern end of this is partly filled by a volcanic ridge, covered with grass, Pandanus, and low scrub. The northern portion of the basin is partly wooded, with groves of coconut palms and cleared cultivated areas. There are but [487] two trails leading into the interior. One scales the steep cliff behind Tinoa village and enters by a pass in the high ridge on the S.W. side. The other crosses a low place in the N.E.ridge, behind a sand beach and small volcanic knoll, opposite a boat crossing in the reef.

The island is surrounded by a barrier reef, 400 to 600 yards wide and about 1/2 mile off shore. Anchorage may be had outside the reef at the S.W. end, in the lee of a small hor[illegible] There are two boat entrances, one on the west, about 1 1/4 miles N.W.of the village, and the one at the N.E. end. Boats may also cross the reef at high tide near the anchorage at the S.W. corner.

361 The inhabitants, about 100 in number, live in one village, Tinoa, [161] on the S.W.side. Good water may be had from a spring here, but fruit, 312 vegetables and coconuts are only obtainable in moderate quantities. 262 The soil in the basin is fertile, but the difficulty of access prevents 134 extensive agriculture. 241

There are two small reefs, Tavunukui Wai and Tavunukui Vanua, to 13 the south of Tuvutha'. The latter contains a sand cay four feet high.

[p. 54]

13 22. MALAU is a high limestone and volcanic island, 16 miles N.W.of Lakemba and 20 miles S.W.of Tuvutha'. (S.17° 58', 179° 04' W.) The island is 3 1/2 miles long by 2 miles wide, and is surrounded by a fringing reef. The high marginal ridge of upraised coral limestone, which rises percipitously on the north to 580 feet elevation, surrounds a dry central volcanic basin, carpeted with grass, scrub and Pandanus. The ridges are well forested.

There is no anchorage for vessels, but boats can cross the reef opposite the village of Salia on the east side, and also on the N.W. side, at high water.

312 Water is not abundant, but may be had at the villages, together with limited supplies of staple groceries and vegetables.

361 There are three villages on the island. Salia on the east side
[366] has a native population of 140 and two chinese stores. Narothivo
177 is located about a mile and a quarter to the N.N.W. and has 117
[161] people. Liku, with 59 natives is on the south-east side. There is
487 no landing at Liku, and all supplies and copra has to be carried
13 by trail over the ridges and across the central basin. Gaps in the limestone ridges on each side, with gradual slopes of volcanic material leading up to them, make this trail more accessable than
181 that on Tuvutha'. The people appear to be prosperous and produce
245 quite a little copra from the extensive coconut groves.

177 On the high ridge S.W. of Salia there is the site of an
361 ancient fortified village, perched at the top of a cliff.
712

[p.56]

13 24. THITHIA (pronounced thē-thē-ā) is a moderately large, nearly circular island of volcanic and limestone formation, 17 miles N.W. of Naiau and about the same distance S.S.W. of Mango. The island is about 4 miles in diameter, with the interior undulating grassland, rising in several peaks to a height of over 500 feet. Delana Bo, east of the center of the island, is said to be the highest point, but two peaks on the west marginal ridge are as high or higher. As usual, the ridges of upraised coral limestone are marginal, but here they are somewhat reduced in extent, there being also volcanic ridges [312] on the south, west and north sides. A moderately large stream, flowing to the N.E., drains the central portion, and there are numerous smaller streams. Good water is plentiful.

The island is surrounded by a fringing reef, 300 to 800 yards wide. There is a good anchorage off the village of Tarukua, at the N.W. point, with the prevailing S.E. to E. winds. Here landing is good at any time of the tide. There is also a temporary anchorage off Tambuta Plantat- 60 yards wide on, a mile to the south. There is a small break in the reef opposite the village of Lomati, but as there is very little protection from the prevailing wind, vessels seldom anchor here.

Snakes are ~~also~~ said to be abundant. There are numerous lizards and land crabs. Besides the usual land birds, introduced mynahs and "magpies" are abundant.

There are several caves in the N.E. cliffs, some containing bats, [135] and one said to have a deposit of low grade phosphate.

361 Thithia is one of the most advanced and prosperous islands of Lau. [161] There are five villages with a combined population of over 400. [622] The residence of the Buli[1] is at Tarukua, at the N.W. end, which has 75 [161] natives and a small Chinese store. The district hospital, with a [366] native practitioner in charge, is located here. Mambula', at the S.W. 179 [143] [759]

[p.60]

1 [Buli or chief -- analyst]

[THITHIA I.]

361 [161] [366] [179] is the largest village, with 123 ~~inhabitants~~ residents and a Chinese store. Natheva is a small village on the S.E., with 40 natives, and also has a little store. Natokalau, on the east side has 65 residents.

361 361. [205] [245] [466] Lomati, on the N.E., at the mouth of the large stream, is a propperous village with 115 residents and a large Chinese store. Mr. C.B.Crabbe, coconut planter and postmaster, who lives here, also keeps a store, mainly for the convenience of his workmen.

423 Two sections of the island, Tambuta on the west side and Vakindranu on the east, are privately owned by the Borron Estate, under the management of Mr. E.J.Brodnam, who is

245 interested in tropical agriculture and natural history. Here extensive groves of cocoanuts have been set out and much copra is produced.

[p.61]

[VANUA MBALAVU I.]

361 the establishment of a good stable government in the western part of
[505] Fiji, and cutter service between the various islands and Levuka and Suva, most of its prosperity has vanished.

Another large village is Mualevu, at the east foot of Koro Mbasanga.
[366] This village has a good store and an abundant water supply, piped
[312] down from the adjacent valley, which contains the only real stream seen
[161] on the island. The population is given as 196. All the villages are
[487] connected by good trails.

241 The island is not as extensively cultivated as it might be. There are small areas of native food stuffs planted in the valleys and on the lower slopes behind the various villages. And the flats are occupied
13 by small groves of coconut palms. But most of the limestone region remains in native forest, and much of the grassy volcanic ridge is left in that state.

[312] Water is not very abundant, but may be obtained at the villages,
[366] especially Mualevu. Supplies may be secured there and at Lomaloma.

Anchorage is good in many of the bays, besides at Lomaloma, and landing is possible anywhere in the volcanic region and in many of the limestone bays. The limestone country is extremely rough and uninviting, but pockets may be made to support groves of coconuts, as at Nambavatu.

The "Bay of Islands", south-east of Ngillangilla, contains one long low island and several small islets. Here anchorage is good. Andawathi I. (250') and Yamuthaloa I. (160') lie to the S.S.E. of this bay.

[312] There is a hot spring near the gap between the volcanic and limestone formations at the south end.

[p. 69]

13 28. AVEA is a small island composed of elevated coral limestone and volcanic material, lying a little over a mile off the N.E. side of Vanua Mbalavu. It is 1 3/4 miles long by 1/2 to 5/8 mile wide, pointed at both ends and rising to a height of 600 feet. The center is a small, narrow, wooded plateau, from which rise the two peaks, Salia (600'), and Sangawelangi (about 500'). The slopes rise abruptly from a narrow beach covered with coconut palms. The island is fringed with a coral reef on the east side and is connected to the north reef by a coral strip, over which small boats can pass at any time of tide. On the S.E. side is a grassy volcanic hill, the slopes of which are under cultivation.

361 161 312 487 The village, Avea, is located on the S.W. point and has a population of about 60 natives. There is a small freshwater pool at the foot of a cliff on the south end. A good trail leads from here to the village.

172 Thehe remains of an ancient village occupies part of the flat-topped plateau.

13 29. Malata is a small wooded island, of partly limestone and partly volcanic material. It is a continuation S.S.E. of the limestone ridge at the south end of Vanua Mbalavu, with which it is connected by a broad reef which dries at 3/4 ebb tide, with a gap of only a few hundred feet. The island is 1 1/2 miles long by 1/2 mile wide, and rises to a height in the center of 420 feet.

[361] [291] [295] The village is situated on the N.E. side, where there is a grassy and partly cultivated volcanic hill, with a grove of coconut palms. Other portions of the island are also of volcanic formation.

30. Susui is a somewhat larger island of limestone and volcanic formation, lying to the eastward of the south-east point of Malata, with which it is connected by a reef which dries at 1/2 tide. It is 2 1/3 miles long by 3/4 mile wide. The western half is of wooded, elevated coral limestone,

[SUSUI I.]

13 the highest portion of which is a central transverse ridge, 430 feet high. The eastern half is a long, grassy flat of volcanic material, thickly covered with groves of coconut palms, which run up the eastern slope of the central hill. On the flat are two small hills covered with Casuarina trees. The village of Susui is situated at the N.W. [361] corner of this flat, at the head of a small bay. It has a population [161] of 67. The island is said to be used as a grazing ground for cattle. [233] Considerable copra is also produced. [245]

To the eastward are two small islands. The larger one, 190 feet high, has a small grove of coconut palms. The smaller, 80 feet high, rises more abruptly with rocky slopes adorned with Casuarina trees.

[p.71]

13 Ml. MUNIA is a small volcanic island, 2 1/4 miles long by 1500 yards wide, lying 3 1/2 miles E.by S. of Susui and 15 miles E.by N. of Mango. A high ridge traverses the island, reaching a height of 950 feet near the center. The island is surrounded by a fringing reef, which connects it with the south side of the barrier reef which surrounds the Exploring group. The island is entirely made up of volcanic material.

473 Munia is privately owned, by Mr. H.H. Steinmetz, an Englishman, who
162 produces copra. His homestead is located on the S.E.side at a place
295 where there is a small bight in the reef. Here a pier has been built
361 out nearly to deep water. Anchorage here is fair, except when the
504 strong
13 wind is from the S.E.to N.E. A better anchorage may be found in the lee of the island. Good paths traverse the island and its slopes are
487 thickly planted with cocoanut palms. Water is fairly abundant, there
312 being several wells.

Mr. Steinmetz has kept careful meteorological records for the
127 past 29 years (1924). A summary of his rainfall data is given in the introduction.

464 There is no native population on the island other than the workmen.
161 or
It formally possessed native inhabitants, however, and bones and ethnological objects have been dug up about the homestead.
[172]

[p75]

13 32. THIKOMBIA - I - LAU is a small limestone and volcanic island located on the east side of the lagoon, 5 1/2 miles N.E. of Munia. It is irregularly rectangular in outline, 1 1/4 by 1 1/8 miles, and rises to a height of 550 feet. The western part consists of a volcanic plateau surrounded by a ring of coral limestone hills, thus forming a raised basin, similar to Vanua Vatu. The eastern part is a steep hill with spurs of volcanic conglomerate, separated from the western mass by a low divide connecting the heads of two deep valleys. The south and east sides are furrowed by small valleys or pockets running back from the sea. Here the beach is alternately volcanic rock, sand and sandstone.

361 The village of Thikombia, on the S.W. end, consists of a dozen houses,
[161] with a population of 50. There are extensive cultivated areas in the
291 volcanic basin, and small groves of coconut palms along the beach and in
the N.E. and S.E. valleys. Water is not abundant, rainwater being caught
312 and stored in a cement tank at the village.

Vessels may anchor in the lee of the island, and landing is good
13 both at the village and on the north sand beaches. Trails lead up onto
487 the plateau from both the north and south sides. A burial cave
764 containing numerous skeletons was explored on this plateau.
172

[p. 76]

7

13 [161] 34. The KIMBOMBO IS. are a group of 3 small, uninhabited islets, 6 miles north of the N.W. end of Vanua Mbalavu and 13 miles eastward of Naitaumba. They are surrounded by a barrier reef, 4 1/2 miles E.& W. by 3 miles N.& S. An entrance on the N.W. admits vessels into the lagoon, where good anchorage may be found.

The largest islet, the south-eastern one, is sub-crescent-shaped, about 300 by 400 yards. It is composed of exceedingly rough coral limestone and surrounded by an undercut shelf. The islet slopes up gradually from the N.& W. to a height of 190 feet, to fall sheer to the water on the east. The slopes are densely covered with the usual trees, shrubs and herbs found on rough limestone islands. There is no fresh water [312] and insect life is scarce. A number of "flying foxes" (fruit bats) and the usual land crabs were seen. There are two small rocks off the N.W. side.

The middle islet, although only 200 or 300 yards to the N.W., is composed of conglomerate and bedded tuff of volcanic origin. The bedded strata dip to the E. and N.E. at an angle of about 30°. The islet is 100 by 60 yards and 120 feet high. It slopes up gradually from the S.E. with a cliff on the N. and N.W. A sand beach borders the W. and S.E. [361] sides, with a hut and small grove of coconut palms. The rounded summit is covered with small trees, and the slopes with casuarinas.

The small islet, on the W., is a steep pinnicle of tuff and conglomerate, about 100 feet high. completely surrounded by a sand beach, with coconut palms on the south and a few small trees on the summit. A line of reef runs out to a patch of flat rocks on the N.E., and a similar reef connects the islet with two flat rocks to the south.

114 The observations of Agassiz (Bull.Museum Comparative Zoology, XXXIII, p.88, 1899), that the highest island is volcanic and the other two of elevated limestone, is incorrect.

[p. 79]

13 86. MAITAUMBA is a trapezium-shape volcanic and limestone island, lying 15 miles N.W. of Vanua Mbalavu and 18 miles S.W.of Wailangilala. It is surrounded by a barrier reef which lies from 1/4 to 3/4 mile off shore. On the west the reef is reduced to a line of coral heads and patches. Here small boats may enter. Vessels may anchor, with an off shore wind, on a narrow shelf off this west side.

The island is 2 miles N.& E. by 1 1/2 miles N.& S. A central basin is surrounded by limestone and volcanic hills, the highest, on the S.E., reaching an elevation of 610 feet in a flat-topped volcanic peak rising with steep slopes. The limestone portions, especially on the N.E. and N.W. are densely wooded; the volcanic hills are covered with the usual grass, scrub and pandanus; and the basin contains an extensive grove of coconut palms.

423 The island is privately owned by Mr.G.M.Henning, who resides at a
361 homestead on the west side. Considerable copra is produced. Fresh
245 water is abundant, and small quantities of produce, turkeys, etc.,
312 might be obtainable at the homestead. Good trails traverse the island.
487 There is no native population other than the plantation workmen.
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The MALIMA Islets, two small uninhabited islets lying 6 miles S.E.
13 of Maitaumba, were not visited. They are surrounded by a continuous circular barrier reef, about 2 miles in diameter, with a small boat passage on the north side. The larger islet reaches a height of 130 feet in a conspicuous lump on its S.W. end. The lagoon contains numerous rocks and coral heads.

[p.83]

13 39. NUKUTOLU ISLETS are three in number, composed of sand and coral reef, and situated about 4 miles westward of Yathata.

The eastern islet is the largest, eliptical in outline, about 350 yards N.& S. by 250 to 300 yards wide, and covered with littoral trees and cocoanut palms, 100 feet to the top of the vegetation. It is surrounded by a fringing reef, reaching about 1/4 mile off shore.

The middle islet is somewhat smaller and lower, being about 80 feet to the top of the vegetation, with a few cocoanut palms on the S.W. side. The trees are here reduced to stunted scrub. The fringing reef lies about 1/4 mile offshore on the N.W., and closer on the east. On the south it makes a sharp elbow and extends westward to the western islet in a narrow arm. There is a small rock at the elbow.

The western islet is the smallest, not over 40 or 50 feet high to the top of the bushes. It has a small flat, with an open covering of scrub and vines. To the south, a rocky shelf extends above water for about 100 yards.

We found fair anchorage on a shelf in the cove, west of the middle islet. The islets are uninhabited, but are occasionally visited by the natives of Yathata for cocoanuts and turtle.

484 161 245 225

[p.86]

13 [103] 40. VATU VARA I. (or Hat island, because of its resemblence, in profile from the E. and W., to a slouch hat) lies 9 miles south of Yathata. (S.17° 26', 179° 32' W.) It is surrounded by a fringing reef with a small shallow lagoon on the west. This island is the highest in Lau, the bold central peak rising to a height of 1630 feet. The slopes of this peak rise percipitously to a flat, crater-like summit, where the [172] [712] ruins of a fortified village are located.

The island is sub-circular, about 1 1/4 miles in diameter, with a square point on the S.E. It is composed of upraised coral limestone, densely wooded, and with small groves of coconut palms in pockets around 423 361 245 the foot of the talis slopes, and on the beaches. It is privately owned by the estate of the late Captain Wilson. The neat, substantial homestead is located on the west side. Copra is produced.

13 502 Landing may be made without difficulty on ~~the~~ a sand beach on the N. side, thru a small break in the reef, marked by a beacon.

464 161 312 241 There are no inhabitants except the caretaker and a few workmen. Water is not abundant, and but little cultivation is done.

[p.88]